

*GLOBAL CHANGE EDUCATION PROGRAM
ORIENTATION*

June 6 — June 13, 2004

A G E N D A

SUNDAY - JUNE 6, 2004

1:00 - 5:00 p.m.

WELCOME to the GCEP ORIENTATION

Lodging

Hotel Registration Desk

GCEP Registration

Hotel Lobby Area

6:00 - 9:00 p.m.

INITIAL WORKING SESSION

*Guest House Restaurant
Food and Beverages*

Introductions

*Milton Constantin, Program Manager, GCEP
Oak Ridge Institute for Science and Engineering*

Welcome

*Barry Lesht, Acting Director
Environmental Research Division
Argonne National Laboratory*

Goals and Objectives for Summer 2004

*Jeffrey Gaffney, Chief Scientist, GCEP
Argonne National Laboratory*

END OF DAY ONE

GLOBAL CHANGE EDUCATION PROGRAM ORIENTATION

June 7, 2004 - MONDAY

Morning Session

7:30 - 8:30 Breakfast Conference Room A

8:30 - 9:00 Welcome to SURE Orientation

*Milton Constantin
Program Manager, GCEP
Oak Ridge Institute for Science and Education*

Overview of Orientation

*Jeffrey Gaffney
Chief Scientist, GCEP
Argonne National Laboratory*

9:00-10:00 A Global Perspective from Space – Megafans and Aerosols

*Justin Wilkinson
Lockheed Martin Space Operations
National Aeronautic Space Agency (NASA)*

10:00-10:30 Break

10:30-11:30 Urban Microclimates: Physical Mechanisms and Significance

*John Frederick, Professor
The University of Chicago*

11:30-12:00 Open Discussion

12:00 Lunch

On Your Own

GLOBAL CHANGE EDUCATION PROGRAM ORIENTATION

June 7, 2004 - ~~MONDAY~~

Afternoon Session

<i>1:00-2:00</i>	<i>Carbon Dioxide Cycling in the Oceans</i>	<i>David Archer, Professor The University of Chicago</i>
<i>2:00-2:30</i>	<i>Gulf of Mexico Corals as Monitors of Environmental Change</i>	<i>Amy Bratcher, GREF Fellow Texas A&M University</i>
<i>2:30-3:00</i>	<i>Break</i>	
<i>3:00-4:00</i>	<i>Geoarchaeology: Using Remote Sensing to Understand Human Interactions in Earth Dynamics</i>	<i>Douglas R. MacAyeal, Professor The University of Chicago</i>
<i>4:00-4:30</i>	<i>Open Discussion</i>	

end of day two

GLOBAL CHANGE EDUCATION PROGRAM ORIENTATION

June 8, 2004 - TUESDAY

Morning Session

<i>7:30-8:30</i>	<i>Breakfast</i>	<i>Conference Room A</i>
<i>9:00-10:00</i>	<i>Terrestrial Ecology Overview - CSITE Studies</i> <i>Julie Jastrow, Environmental Scientist</i> <i>Argonne National Laboratory</i>	
<i>10:00–10:30</i>	<i>Tracking Carbon Sequestration with Isotopes</i> <i>Roser Matamala, Assistant Ecologist</i> <i>Argonne National Labor</i>	
<i>10:30-11:00</i>	<i>Break</i>	
<i>11:00-12:00</i>	<i>The Advanced Light Source – APS: How It Can Aid In Environmental Studies</i> <i>Kenneth Kemner, Physicist</i> <i>Argonne National Laboratory</i>	
<i>12:00</i>	<i>Lunch</i>	<i>On Your Own</i>

GLOBAL CHANGE EDUCATION PROGRAM ORIENTATION

June 8, 2004 - TUESDAY

Afternoon Session

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| <i>1:30-2:00</i> | <i>DNA Micro-Array Analysis of Soybean Growth Under Elevated
Ozone and Carbon Dioxide</i> | <i>Tony Watson, GREF Fellow
University of Illinois, Urbana-Champaign</i> |
| <i>2:00-2:30</i> | <i>Land Use and Land Cover Changes in Temperate Savannas</i> | <i>Emily Hollister, GREF Fellow
Texas A&M University</i> |
| <i>2:30-3:00</i> | <i>Impacts of Climate Patterns on the Vegetation Dynamics of
Grasslands in the Southwest United States</i> | <i>Allison Drake, GREF Fellow
University of Arizona</i> |
| <i>3:00-3:30</i> | <i>Break</i> | |
| <i>3:30-4:00</i> | <i>Multiple Interacting Global Changes and Plant-Mediated Feedbacks via
Decomposition</i> | <i>Elsa Cleland, GREF Fellow
Stanford University</i> |
| <i>4:00-5:00</i> | <i>Fermilab Prairie Restoration Facility</i> | <i>R. Michael Miller, Senior Scientist
Argonne National Laboratory</i> |

END OF DAY THREE

*GLOBAL CHANGE EDUCATION PROGRAM
ORIENTATION*

June 9, 2004 - ~~wedne~~SDAY

MORNING-AFTERNOON SESSION

<i>7:30-8:30</i>	<i>Breakfast</i>	<i>On Your Own</i>
<i>8:45</i>	<i>Board Bus</i>	
<i>9:00</i>	<i>Depart from Guest House</i>	

FIELD TRIPS

<i>9:30-12:00 -</i>	<i>Fermilab Prairie Restoration Site</i>	<i>Julie Jastrow, Roser Matamala, R. Michael Miller Argonne National Laboratory</i>
<i>12:00-1:00</i>	<i>Return to ANL</i>	<i>Lunch On Your Own</i>
<i>1:30-3:00</i>	<i>Tour of Advance Synchrotron Light-Source (APS)</i>	<i>Kenneth Kemner Argonne National Laboratory</i>
<i>3:00-4:30</i>	<i>Tour of 203-Environmental Research Division Labs</i>	<i>Jeff Gaffney, Nancy Marley, Roser Matamala Argonne National Laboratory</i>

END OF DAY FOUR

GLOBAL CHANGE EDUCATION PROGRAM ORIENTATION

June 10, 2004 - ~~THURSDAY~~

Morning Session

<i>7:30-8:30</i>	<i>Breakfast</i>	<i>Conference Room A</i>
<i>8:30-10:00</i>	<i>ARM Overview</i>	<i>Douglas Sisterson, Meteorologist Argonne National Laboratory</i>
<i>10:00-10:30</i>	<i>Break</i>	
<i>10:30-11:30</i>	<i>The ARM Mobile Facility and UAV Program</i>	<i>Jeff Gaffney, Senior Scientist Argonne National Laboratory</i>
<i>11:30</i>	<i>Lunch</i>	<i>On Your Own</i>

*GLOBAL CHANGE EDUCATION PROGRAM
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June 10, 2004 - ~~THURSDAY~~

Afternoon Session

<i>1:00 - 2:30</i>	<i>ARM Sites and Instruments</i>	<i>Douglas Sisterson, Meteorologist James Liljegren, Atmospheric Research Engineer Argonne National Laboratory</i>
<i>2:30 - 3:00</i>	<i>Snow Pack Chemistry in Alaska</i>	<i>Laura Alvarez-Aviles, GREF Fellow The University of Alaska, Fairbanks</i>
<i>3:00- 3:30</i>	<i>Break</i>	
<i>3:30-5:00</i>	<i>How Do Scientists Do What They Do?</i>	<i>Douglas Sisterson, Meteorologist Argonne National Laboratory</i>

END OF DAY FIVE

GLOBAL CHANGE EDUCATION PROGRAM ORIENTATION

June 11, 2004 - friDAY

Morning-Afternoon Sessions

<i>7:30-8:30</i>	<i>Breakfast</i>	<i>Conference Room A</i>
<i>9:00-10:00</i>	<i>Overview of NIGEC</i>	<i>Jeff Gaffney, Senior Scientist Argonne National Laboratory</i>
<i>10:00-10:30</i>	<i>Break</i>	
<i>10:30-11:00</i>	<i>Solar Irradiance in the UV-B Region as Influenced by Ozone and Particulate Abundances in an Urban Atmosphere</i>	<i>Shelby Winiecki, GREF Fellow The University of Chicago</i>
<i>11:00-11:30</i>	<i>Soil Ecology Studies in Puerto Rico</i>	<i>Erika Marin-Spiotta, GREF Fellow University of California, Berkeley</i>
<i>11:30-1:00</i>	<i>Lunch</i>	
<i>1:00-2:00</i>	<i>Nancy's Global Change Hot Topic – 2004!</i>	<i>Nancy Marley, Chemist Argonne National Laboratory</i>

END OF DAY SIX

GLOBAL CHANGE EDUCATION PROGRAM ORIENTATION

June 12, 2004 - SATURDAY

Morning Session

<i>7:30-8:30</i>	<i>Breakfast</i>	<i>Conference Room A</i>
<i>8:30-9:30</i>	<i>The Atmospheric Science Program: Aerosol Radiative Forcing for Fun & Profit</i>	<i>Nancy Marley, Chemist Jeff Gaffney, Senior Scientist Argonne National Laboratory</i>
<i>9:30-10:30</i>	<i>Megacities – Mexico City and Houston as Potential Field Sites</i>	<i>Jeff Gaffney, Senior Scientist Argonne National Laboratory</i>
<i>10:30-11:00</i>	<i>Break</i>	
<i>11:00-12:00</i>	<i>Atmospheric Aerosol Composition as a Function of Hygroscopicity, Volatility and Density</i>	<i>Dabrina Dutcher, GREF Fellow University of Minnesota</i>
<i>12:00</i>	<i>Lunch</i>	<i>On Your Own</i>

GLOBAL CHANGE EDUCATION PROGRAM ORIENTATION

June 12, 2004 - SATURDAY

Afternoon Session

*1:30-5:00 WORKSHOP ---How Do You Write and Successfully Publish A Scientific Paper
or Abstract? The Politics of Publishing!*

*Nancy Marley, Chemist
Jeff Gaffney, Senior Scientist
Argonne National Laboratory*

Break Time Included during Workshop

Evening Session

*6:30 – 9:00 FINAL WORKING SESSION Guest House Restaurant
Food and Beverages*

RECOGNITIONS AND PRESENTATION OF CERTIFICATES

KEYNOTE ADDRESS:

*A Hydrogen Economy – Is it a Panacea?
What Do We Know About H₂ and the Environment?*

*Jeff Gaffney, Senior Scientist
Argonne National Laboratory*

END OF ORIENTATION AND DAY SEVEN

*GLOBAL CHANGE EDUCATION PROGRAM
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June 13, 2004 - SUNDAY

Morning Session

Breakfast

On Your Own

***Travel to Your Summer Undergraduate Research Experience
(SURE) Research Facility***

HAVE A GREAT SUMMER!

*See you again
In Washington, dc
August 15, 2004*